The purpose of this presentation is not to repeat exactly the Community Health Standards and Guidelines which are available in an ACBAR document. Rather it will be to give some background information and try to answer basic questions such as WHY and HOW to vaccinate, and to present some of the ISSUES for Afghanistan.

I - VACCINATION : WHY ?

Why vaccinate ?

* Each year UNICEF produces an annual report called State of the World's children. In 1987 Afghanistan had the dubious distinction of being credited with the highest infant mortality rate and the highest under 5 mortality rate in the entire world.
The figures are the following:

- 173 infants die in their first year of life (for every 1000 live births). That means that one child among 6 dies before their first birthday.
- 304 children die before their reach the age of 5 (for every 1000 live births).

These figures were presumably based on the Russian held areas around Kabul and in theory they should be better than the rest of the country. But some survey performed in rural areas of Afghanistan have showed figures of under 5 mortality as high as 400 per 1000.

* The main causes of child mortality observed by different medical teams who worked in rural areas of Afghanistan during the last years seem mainly to be :
- diarrhea
- and measles,

but also :
- malnutrition,
- respiratory infections
- and neonatal tetanus.

Most of these 5 causes of child mortality can be prevented easily by either Vaccination or Health Education. Among these diseases,
- measles can be prevented by vaccination,
- neonatal tetanus can be prevented by vaccination and health education.

To reduce dramatically child mortality, vaccinations are compulsary, but not always sufficient and should be linked with other means. So, in the Community Health Guidelines one will find Vaccinations also in the chapters on Essential Medicines, Tuberculosis and Maternal Child Health.

II - VACCINATION : HOW ?

How is-it done ?
How should it be ?

* All around the world the vaccination strategy recommanded by WHO and UNICEF is the E.P.I : Expanded Programme on Immunization. E.P.I is immunization against 6 target diseases which can threaten children in their first years. These 6 diseases are :
- measles,
- tetanus,
- whooping cough,
- diphteria,
- polio,
- tuberculosis.

Measles is the leading cause of fatality and tetanus the second. The 6 vaccines need to be administered to the target population :
- children from birth to 4 years old,
- and women of childbearing age (for tetanus).

* A * in PAKISTAN, in REFUGEES CAMPS; E.P.I has been implemented for several years now. Biginning with 2 years ago, an active acceleration of this program was started by UNHCR and UNICEF.

* B * in AFGHANISTAN; the situation is currently different.

- First, one has to note that most of the immunization campaigns carried out by the Kabul Government (in 12 provinces in 1988) were located in the urban areas.

- Apart from that, the situation in the rural areas under resistance control, has been documented by some medical monitoring reports. Three approaches have been noted, and only one of these can be recommended.

.1. Health workers receive vaccines through party fronts or Commanders and proceed to vaccinate. These supply are bought in Kabul. The supply and selection is very irregular. Existing reports indicate that care has not been taken :
- for vaccine temperature control,
- for protocol in vaccine administration, or
- for record-keeping.

Nobody knows who has been vaccinated against what, or when.

This kind of vaccination campaign has to be discouraged and stopped. Why ?

- Because vaccines are active only if they are kept cold at a proper temperature. Without control and cold-chain, vaccines become too hot and stop to be active any longer. And it is not useful to administer a vaccine which has been killed or inactivated by heat. It won't give protection at all against the diseases and people will loose confidence in vaccines altogether.

- For some vaccines 2 or 3 shots (or boosters) need to be given, in order to give full protection and have a child fully immunized. For these vaccines only one shot is not sufficient. Without proper record keeping (registers, vaccination cards) it is not known who has been vaccinated. So you cannot complete the immunization process. And without records what patients say is not reliable because they can easily confuse vaccines with other kinds of injections.

- Last but not least, sterile conditions (asepsis) need to be respected and injections made with sterile materials to avoid complications such as infections, abcesses, etc...

.2. In response to diarrheal outbreaks, which have been rapidly concluded to be "Cholera epidemics", commanders have mounted vaccination campaigns. They bought the vaccines in Kabul and had them transported.
Again existing reports indicates that there was no vaccine temperature control nor record-keeping.
Such vaccination campaigns should be discouraged and stopped under the best circumstances. Why ?

- Because usually there are no laboratory confirmations diagnosing cholera, and too many diarrheal diseases can be confused with cholera by symptoms.

- Also, WHO recent Guidelines for Cholera Control state :
" The vaccines available at present are not helpful in the control of cholera.... Vaccination campaigns against cholera even with vaccines obtained free of charge, divert resources, attention and manpower from more useful activities".

.3. Comprehensive planned program utilizing trained personnel, viable vaccines and cold chain equipment.
This kind of E.P.I campaigns are implemented by some committees like AVICEN, Alliance Health Committee & MSH, Norwegian Committee, MSF, MDM, International Medical Corps, Swedish Committeee, and more recently International Rescue Committee. And many other committees have plans.
These E.P.I campaigns should be strongly recommended, taken as example, and supported. Why ?

- Because vaccines stay active due to cold chain maintenance and temperature control.

- Asepsis is respected, as well as good injection technique by the personnel who have been trained specifically as vaccinator.

- There is distribution of vaccination cards and keeping registers. And that thus permits subsequents shots and boosters, knowing which injection is due for which child. That leads to complete immunization of the children.

* To summarize : Vaccination is something very technical and should not be started unless 3 main conditions are present :
- Reliable cold chain for vaccine temperature control,
- Proper technical skills (injection technic, asepsis using one needle for one injection) and strict protocol of administration,
- Proper record-keeping (vaccination cards and registers).
All these 3 tasks performed by qualified personnel.

III - ISSUES

Technical recommendations on immunization protocols are contained in the ACBAR guidelines. However some explanations can be given, and some issues discussed.

* A * COLD CHAIN :

To stay potent a vaccine has to be kept at a stable temperature from the manufacture to the syringe (before injection).

.1. in Refugee Camps :

Most vaccines are stored in a refrigerator (or freezer) in a fixed center where there is electricity. There are daily taken from the refrigerator and put in a cold-box or a vaccine-carrier for use in the camps. The vaccinators know how to handle a simple cold-chain on a daily basis.

.2. in Afghanistan :

Refrigerators need to be used in a situation without electricity. The experience gained by different committees having started immunization campaigns in Afghanistan 5 years ago, shows that 3 power sources for cooling (refrigerator) can be considered :

- Kerosene is the most common, but kerosene powered fridges are complicated and difficult to maintain.

- Electricity is very rare. It is possible to use generators but their round-the-clock use is not reliable.

- Gas is difficult to find but is the most efficient for the use of refrigerators : clean and easily maintained.

Until now, due to the importance of maintenance, gas has been the first choice to power refrigerators used by mobile teams sent inside Afghanistan.
In the future if freeze-points to store vaccines can be established it is hoped to run them with generators.

* B * POLIO VACCINE : Oral versus Injectable.

.1. in Refugee Camps :

Oral Polio Vaccine (OPV) has a reasonable cost and is used in every developing country as well as in E.P.I- Afghan Refugees.
Vaccination is not considered complete until vaccine has been given 4 times. This does offer better protection.
But OPV cold chain requirements (needs to be kept frozen) are difficult to reach in Afghanistan without fixed and permanent center to store vaccines.
For these reasons OPV seems to be more appropriate for a refugee or an urban situation.

.2. in Afghanistan :

A modified regimen, already tested in other countries like Senegal, was decided upon based on the cost and the contraints of providing vaccination coverage in Afghanistan. This simplified cross-border concensus E.P.I protocol is supported by UNICEF and uses Injectable Polio Vaccine (IPV).
IPV is mixed with Diphteria-Pertussis-Tetanus vaccine in a DPTP vial. DPTP has higher costs.
But it has a high and consistant antigenic power. It is providing sufficient defenses after only 2 shots. The target population needs to be reached only twice, so less children will default between the shots.
It has a superior stability to heat stress. It does not need to be frozen but kept between 0 and 8 degres Celsius.

In the special conditions of Afghanistan today, circumstances define protocols, and DPTP protocol appears to be currently the most appropriate and cost effective for rural Afghanistan.

* New vaccines are being developed all the time. Vaccines schedules would need to be reevaluated and modified after repatriation.

* C * WOMEN VACCINATION AGAINST TETANUS :

Women should be vaccinated to transmit protection against tetanus to their babies during pregnancy, in order to prevent the baby dying of neonatal tetanus a few days after birth.

.1. in Refugee Camps :

The ideal vaccination team is composed of 2 or 3 male vaccinators along with 1 or 2 woman vaccinators. Women are vaccinated from 15 to 45 years old.
A lot of efforts have been made to develop an outreach strategy. The lady vaccinator goes from house to house. She vaccinates the women and send the children to the male vaccinator outside.
The problem is that most of the lady vaccinators are Pakistani, because it is very difficult to find Afghan women to be trained as lady vaccinator to work using mobile strategy. This outreach strategy is needed to reach the women but most Afghan women do not have permission or mobility to be part of a mobile team.

.2. in Afghanistan :

The experience shows that :
- there is no female vaccinator in rural areas,
- and due to purdah, it is difficult for the male vaccinator to vaccinate women.

It has then been decided to vaccinate against tetanus all girls 5 to 14 years of age in addition to women 15 to 45 years, because of the difficulty of reaching the ideal target population. As a matter of fact it is easier to reach the young and unmarried girls. These girls 5 to 15 years, will be protected when they reach the childbearing age, and then will transmit protection to their babies.

NOTE : in E.P.I, Mujahideen do not belong to the target population for tetanus vaccine.

* D * OTHER AREAS OF COMMON CONCERN AND NEED :

- Poor coverage of under 1 year children.
- High drop-out rate between 2 shots.
- Need to develop Afghan mid and senior level managers and Afghan vaccinator trainers.
- Lack of vaccinators for the South-West provinces.
- Need of coordination to avoid overlap or duplication of vaccination campaigns.

IV - A FEW WORDS ABOUT REPATRIATION

* CURRENTLY :

- in Refugees Camps, immunization coverage of children under 2 is quite low, partly because coverage survey leg behind the actual coverage. Coverage of under 5 is higher and partial coverage has increased dramatically. A lot of efforts have been made recently to raise the percentage of fully immunized children.
The reorientation plan of UNHCR Health program for repatriation plans to :
  - increase outreach strategy
  - strenghten in management, supervision & training
  - improve cold-chain.

- within Afghanistan : very low coverage overall.

So, there is an obvious need to continue vaccination campaigns both in camps and within Afghanistan.

* DURING REPATRIATION :

- There will be mixing of the 2 populations. So one will need to discern who has been vaccinated in the population.
  - Encourage the people to keep their cards;
  - if a child has no card and no BCG scar, he should be started again in all vaccinations. Re-vaccinating a child is not harmful and it is not dangerous.

- Vaccinators trained in different programs, should be retrained to understand the 2 protocols which have been used according to the circumstance.

IN CONCLUSION

The importance of HEALTH EDUCATION should be stressed. Here is a listing of the 8 prime messages produced by UNHCR and Health Education Resource Center (HERC), which should be promoted by all health workers :

- 1. A child who is not vaccinated is more likely to become sick, disabled and die.
- 2. Childhood vaccination protects against 6 dangerous diseases.
- 3. Vaccinations should be started as soon as possible after birth and completed in the first year.
- 4. Every woman should be fully vaccinated against tetanus to protect herself and her babies.
- 5. It is safe to vaccinate newborns, sick children and pregnant women.
- 6. Families should keep their vaccination cards safely.
- 7. Symptoms developped after vaccination are not dangerous.
- 8.Infants must complete the full course of vaccination.

And the following Islamic quote could be remembered : "Protecting your women and children from sickness will save you from doom on Judgement Day".

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DISCUSSION :

- Health education : how is it accomplished ?

It should be performed by all health workers.
Usually vaccinators do some advocacy -and explaining first to political or religious leaders- the interest of vaccination. For example when they go to the mosque at prayer time. Then the following day they are supposed to explain to the people what are the 6 target diseases and the interest of vaccination, before starting vaccinating.

- Retraining : Who ? How ?

Vaccinators trained by AVICEN for AVICEN or for other Committees have been trained to use both protocols : the E.P.I-AR in Refugees Camps is a part of their training, and the simplified one used in Afghanistan. Before repatriation it would be necessary to train the vaccinators working only in refugees camps, on the use of the simplified protocol.
This can be done in AVICEN depending on availability of trainers.

- Mapping of population vaccinated :

This has been performed in AVICEN for the district level. To do that at the village level is a very long process, as you cannot find even on the best map, all the names of the villages. This has started anyway but it is far for completion, and it will be an ongoing process.

- Introducing Tetanus vaccination for girls 5 to 14 in refugee camps :

Most of the audience thought it was a good idea. Dr Andrew Smith (UNHCR) said that they were studying the possibility of changing the protocol in that direction, and that it was really a good idea.

- Relationship with Government in the future :

A structure like AVICEN will be hopefully taken over by the islamic interim government when it is well established in Afghanistan.

W H O / ACBAR

COMMUNITY HEALTH SEMINAR

June 6, 1989

VACCINATIONS

WHY, HOW, and ISSUES concerning AFGHANISTAN

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